THE EMBODIMENTS OF THE INVENTION FOR WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A method for cross-resource sharing of a limited number of serially accessible devices which are physically connected in a complex of MVS images, comprising the steps of:

a) providing a control database shared by all MVS images in the complex;

b) periodically monitoring the control database for devices which have been allocated and by which image;

c) intercepting a device allocation request from a MVS image;

d) performing a request/release operation on the control database to determine if a device or devices satisfy the request;

e) granting allocation of the available devices in the control database to the requesting MVS image if the request is satisfied;

f) updating the control database for flagging an allocated device or devices as being unavailable, regardless of which image made the allocation; and

g) releasing the control database.

2. The method of claim 1 wherein each MVS image periodically performs a request/release on the control database so that

a) if the requesting MVS image has an unsatisfied allocation request in a queue; and

b) if a device or devices are available, then the image enters allocation recovery for re-driving the queued allocation request

3. The method of claim 1 wherein the control database is stored on a shared dasd.

4. The method of claim 1 wherein the control database is accessed through a TCP/IP network interface.

5. The method of claim 4 wherein a local control database is associated with, and maintained for access by, each MVS image through the TCP/IP network interface, one of which is maintained as a master with veto over the other control databases.

6. The method of claim 1 further comprising:

a) providing a software extension for detecting device allocation requests; and

b) accessing the software extension for intercepting device allocation requests.

7. The method of claim 1 wherein the operating system is version MVS/ESA 5.2 or a higher operating system further comprising intercepting device allocation requests at a subsystem interface hook.

8. The method of claim 7 wherein the hook is subsystem interface function call 78.

9. The method of claim 1 wherein the operating system is OS/390.

10. The method of claim 1 wherein the shared control database is located on a low activity dasd for minimizing delays in request/release operations.

11. The method of claim 1 further comprising monitoring of the event notification of a change in devices and adjusting the logical allocations in the control database accordingly.

12. A system for cross-resource sharing of a serially accessible device or devices which are physically connected in a complex of MVS systems comprising:

a) a shared control database;

b) means for request/release updating operations on the control database for flagging which device or devices are unavailable as having been allocated by an MVS system and which MVS system allocated the device or devices; and

c) means for intercepting a device allocation request and which MVS system made the request and using the request/release means for determining if the request can be satisfied from the available device or devices and if so, satisfying the requests and flagging the allocated devices as unavailable to any MVS system and updating the control database accordingly.

13. The system of claim 12 wherein

a) the MVS systems are operating under MVS/ESA 5.2 or a higher operating system which has subsystem interface; and

b) the means for intercepting a device allocation request is through the subsystem interface.

14. The system of claim 13 wherein the subsystem interface is function call 78.

15. The system of claim 12 wherein the shared control database is located on a DASD.

16. The system of claim 12 wherein the shared control database access is through a TCP/IP network.

17. The system of claim 12 wherein the control database further comprises means for flagging a device or devices as available or unavailable due to an unallocation or allocation and which MVS system allocated the device or devices.

18. The system of claim 13 wherein the means for request/release updating operations comprises subsystem software.